

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-008737**Date Inspected:** 23-Aug-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Xian Ping**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG & TOWER Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Sandeep Kumar was present during the times noted above for observations relative to the work being performed.

**BAY 1**

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #027 located on Floor Beam FB205 – 045. Welder is identified as 054460. ZPMC QC is identified as Tian Lei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

FCAW process welding of weld joint #033 located on Floor Beam FB205 – 046. Welder is identified as 059450. ZPMC QC is identified as Tian Lei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

FCAW process welding of weld joint #028 located on Floor Beam FB205 – 047. Welder is identified as 219189. ZPMC QC is identified as Tian Lei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

**BAY 2**

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## WELDING INSPECTION REPORT

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This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #095 located on Floor Beam FB3065 – 001. Welder is identified as 045203. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – B – U2 – F.

FCAW process welding of weld joint #096 located on Floor Beam FB3003 – 001. Welder is identified as 045209. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2233 – B – U2 – F.

### BAY 3

#### Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

1. FB023 – 010 – 125; 126; 127; 070; 090; 092; 082; 085; 142; 104

### BAY 5

#### Visual Inspection Testing

This QA inspector performed VT of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as OBG Component. The weld designations reviewed are as follows:

#### Cable Tray Supports

1. CTSEF (ABC)
2. CTSDFE (BC)
3. CTS4E (ABDEFG)

### BAY 6

This QA Inspector observed the following work in progress:

SMAW process welding of weld joint #9B located on WD1 – A305 – 77M – 1. Welder is identified as 037780. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2212 – Tc – U5b.

SMAW process welding of weld joint #9A located on WD1 – A305 – 77M – 4. Welder is identified as 066456. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2212 – Tc – U5b.

SMAW process welding of weld joint #1B located on WD1 – A305 – 77M – . Welder is identified as 066457. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3212 – Tc – U5b – 1.

### BAY 7

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## WELDING INSPECTION REPORT

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This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #004 located on Edge Plate EP3004 – 017. Welder is identified as 205774. ZPMC QC is identified as Zhou Jie. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

FCAW process welding of weld joint #001 located on DP3060 – 001. Welder is identified as 062447. ZPMC QC is identified as Zhong Dian Xing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 4132.

BAY 11

### Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as TOWER Components. The weld designations reviewed are as follows:

#### LIFT 1 WEST TOWER

Skin a, b, c, d, e with 43M diaphragm

Fit lug on skin a, b, c, d, e of 43M diaphragm

Skin a, e stiffeners with 43M diaphragm

Skin a, e stiffeners with web plate of 43M diaphragm

Skin 'd' cover plate with 43M diaphragm

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No Relevant Conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang - 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Kumar,Sandeep	Quality Assurance Inspector
<b>Reviewed By:</b>	Prue,Erik	QA Reviewer

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